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with a request for the loan of the Muhlenberg Herbarium to Dr. Gray of Harvard, was read; and it was, on motion,

Resolved, That the Secretary be authorized to deliver to the order of Dr. Gray, the Muhlenberg Herbarium, in whole or in part, on the receipt of his agent to return the same.

Resolved, That ten dollars be appropriated for the payment of the expense of labeling the Herbarium, in accordance with Dr. Gray's forthcoming work.

On scrutiny of the ballot-boxes the following persons were declared duly elected members of the Society:

Mr. William Blades, of London.

Mr. William Trautwine, of Philadelphia.

Rev. Samuel Savage Lewis, of Cambridge, England.

Mr. William Jefferis, of West Chester, Penn.

Hon. Washington Townsend, of West Chester, Pa.

And the meeting was adjourned.

Stated Meeting, February 3, 1882.

Present, 6 members.

President, Mr. FRALEY, in the Chair.

Letters of envoy were received from the Musée Guimet, dated Lyons, January 7, 1882; H. Scheffler, Braunschweig, December 6, 1881; and the Torrey Botanical Club, 7 Waverly Place, N. Y. City, January 21, 1882.

A letter of thanks for the action of the Society at its last meeting in regard to the Muhlenberg Herbarium, was received from Dr. Asa Gray, dated Cambridge, January 25, 1882.

A letter from Mr. Leighton Hoskins, dated Philadelphia, February 3, 1882, requesting the loan of the volumes of the Ercolano Bronzi in the Library, was referred to the Secretaries with power to act.

A circular letter was received from the Royal Society of New South Wales, dated Sidney, November 2, 1881.

Donations for the Library were received from the Depart-

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ment of Mines, Melbourne; Royal Academies at Berlin, Rome, and Brussels; Zoologischer Anzeiger, Leipzig; Dr. Hermann Scheffler, Braunschweig; Revue Politique, Paris; Society of Commercial Geography, Bordeaux; Royal Astronomical Society, Cobden Club, and Nature, London; Natural History Society, Boston; Harvard College Library; American Journal, New Haven; Numismatic and Archæological Society, and Torrey Botanical Club, N. Y. City; Engineers' Club, Penn Monthly, the American, and Mr. Henry Phillips, Jr., Phila.; U. S. Census Bureau, Washington; and Prof. N. H. Winchell, St. Paul.

Prof. John Hagen's paper, "On the inclination of the apparent to the true horizon, and the errors rising thereof in Transit, Altitude and Azimuth-Observations," was submitted for the Proceedings.

Mr. Ashburner exhibited a specimen of Colorado Anthracite, and spoke of its composition.

Remarks on the subject were made by Messrs. Price and Britton.

Pending nomination No. 935 and new nominations Nos. 951 to 955, were read.

Mr. Henry Phillips, Jr., for the Committee on the Celebration of the Birthday of Franklin, made the following report, which was accepted and the Committee discharged.

January 28, 1882.

A special meeting of the Society was held this evening at six o'clock, at the Social Art Club, No. 1811 Walnut Street, pursuant to a resolution of the Society to celebrate the Birthday of Benjamin Franklin by a subscription dinner, at which were present:

President-Frederick Fraley.

Secretary-Daniel G. Brinton, M. D.

Curators-Charles M. Cresson, M. D., Henry Phillips, Jr.

Treasurer—J. Sergeant Price.

Councillors—Robert E. Rogers, M. D., Henry Winsor, William A. Ingham.

Members—S. D. Gross, M. D., Robert H. Allison, M. D., William Sellers, Eckley B. Coxe, William Pepper, M. D., C. N. Peirce, M. D., Joseph M. Wilson, J. Blodget Britton, Theo. G. Wormley, M. D., Wm. B. Rogers, Jr., B. B. Comegys, William Thomson, M. D., John Welsh, Morris

Longstreth, M. D., Henry Hartshorne, M. D., J. Price Wetherill, Carl Seiler, M. D., William Goodell, M. D., Frank Thomson, Robert Patterson, Edward D. Cope, Charles S. Wurts, M. D.

Dinner was then served, and interesting addresses were delivered by Frederick Fraley, President; S. D. Gross, M. D., Hon. John Welsh, Robert E. Rogers, M. D., William Pepper, M. D., Eckley B. Coxe, and E. D. Cope, and at 10 o'clock P. M. the meeting adjourned.

Mr. Ashburner introduced the subject of a bill before Congress for establishing a Government Bureau of Mines.

On motion of Mr. Price, the consideration of the propriety of the Society's recommending to Government either the establishment of such a bureau, or the establishment of an executive department to take charge of the agricultural, mining and commercial interests of the nation, was referred to a committee consisting of the President, Mr. Fraley, as Chairman, Mr. Ashburner and Mr. Price.

And the meeting was adjourned.

On the Inclination of the Apparent to the True Horizon and the Errors rising thereof in Transit, Altitude, and Azimuth-Observations. By John Hagen, S. J., College of the Sacred Heart, Prairie Du Chien, Wisconsin.

(Read before the American Philosophical Society, February 3, 1882.)

In the year 1875, Mr. Hann, editor of the "Zeitschrift der Oesterreichischen Gesellschaft für Meteorlogie," called attention to a special kind of irregularities in the figure of the earth, which hitherto were not sufficiently taken into account. According to him the most important perturbation of the ellipsoidal level of the sea arises from the continents attracting the waters of the surrounding oceans. (See Mittheilungen der geogr. Gesellsch. zu Wien, N. 12, 1875.) He supports his statement by the fact, that the continents are to be compared to large mountains, which by necessity, must disturb the level of the sea in the same way, as the Cordilleras of South America, the Apennines in Italy and the Shehallien in Scotland were able to deviate the plumb-line, and again by the fact, that the force of gravity on islands was in average found greater than was forecast by calculation, from which Dr. Hann concludes that the level of the oceanic islands be lower than that of the shores of the continents. He estimates in general the vertical distance between the disturbed and the undisturbed level of the sea